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Feb. 6/1897

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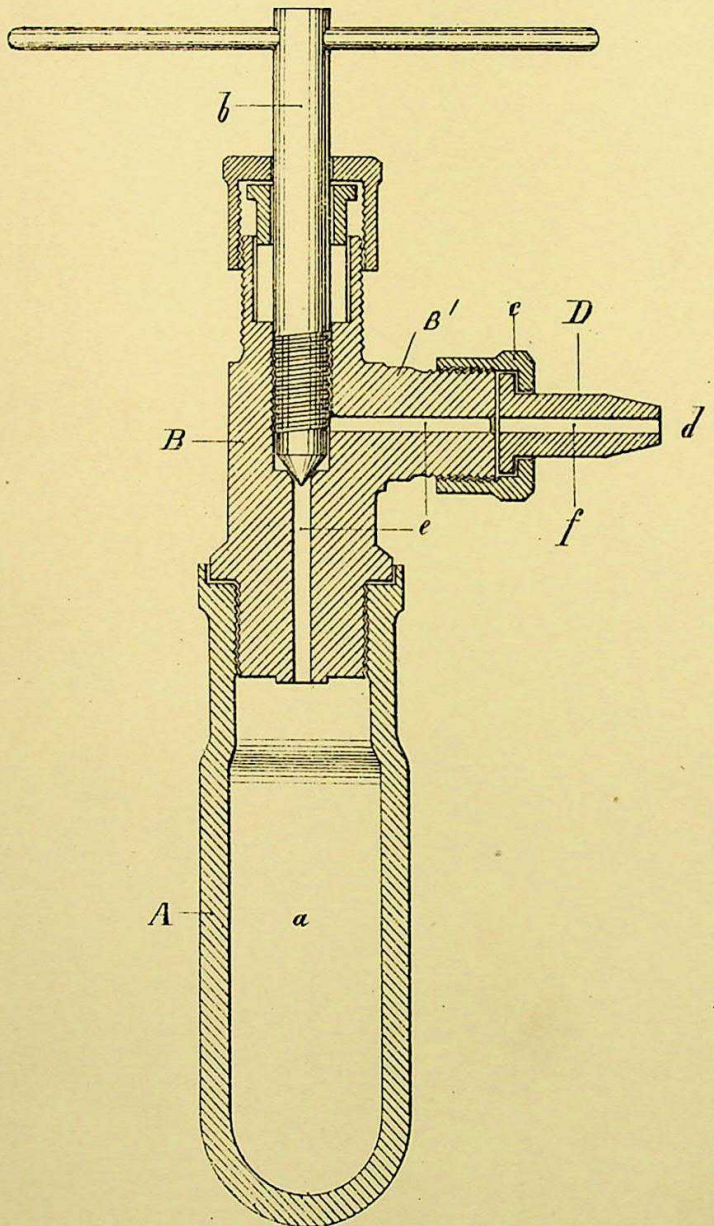
A.D. 1896. Oct. 30. No. 24,188.

KOHLMANN'S Complete Specification. *(1 SHEET)*

M.T.a. for inflating tyres.



[This Drawing is a reproduction of the Original on a reduced scale]

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N° 24,188 A.D. 1896

Date of Application, 30th Oct., 1896—Accepted, 6th Feb., 1897

DUPLICATE

COMPLETE SPECIFICATION.

A Method of and Apparatus for Inflating Pneumatic Tyres, or Supplying any Loss through Leakage or other Cause, by Means of Liquefied Gases.

I, BENNO KOHLMANN, of 4 Leipzigerstrasse, Leipzig-Reudnitz in the Kingdom of Saxony and German Empire, Chemist, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement :—

This invention relates to a method of and apparatus for (1) inflating pneumatic tyres with the necessary compressed air and (2) reinflating, quickly and easily, pneumatic tyres from which, during use, some of the compressed air has escaped.

The apparatus for carrying out the invention is illustrated on the annexed sheet of drawings ; it consists of a steel bottle A containing a liquefied gas which has no injurious action on india-rubber or metal. This bottle A, after having been tested to the required pressure, has fitted in it a tee-piece B having a channel *e* bored in it.

The branch B^1 of the tee piece is capable of being jointed gas tight to the nipple D of the valve of the pneumatic tyre by means of a screw coupling *c* and so that the channel *e* of the branch B^1 leads to the passage *f* of the nipple. The nipple D is connected at *d* with the inner tube of the pneumatic tyre to be inflated by means of an india-rubber valve capable of opening inwardly.

The channels *e*, *e*, of the tee-piece can be opened or closed, at the part shown on the drawing, by means of a screw down valve *b*. When the valve *b* is opened the liquefied gas passes from the space *a* to the channel *e* and thence through the india-rubber valve into the inner tube of the tyre to be inflated. As soon as the required pressure in the tyre (generally two atmospheres) has been reached, (which pressure can be read off a pressure gauge fitted to the pneumatic tyre) the valve *b* is closed, and, after the connection between the bottle A and the valve B has been broken by unscrewing the coupling nut *c*, the bottle A is also closed and kept ready for the next inflation.

The tyre, which is now inflated with compressed air, automatically closes, as usual, by means of the india rubber valve arranged at the part *d* of the nipple as before stated.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I consider novel and desire to claim is :—

1. The method of inflating or reinflating pneumatic tyres by means of a vessel containing a liquefied gas, substantially as hereinbefore set forth.

2. The apparatus for inflating tyres consisting of the vessel A, containing liquefied gas, provided with a tee piece B having channels *e*, and a screw down valve *b*, substantially as hereinbefore described and shown on the drawings annexed.

Dated this 29th day of October 1896.

H. D. FITZPATRICK,
70 Wellington Street, Glasgow, Agent.

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[*Price* 8*d*.]